

IN THE CLAIMS:

Please amend the claims as follows:

1. (Original) An apparatus for controlling the flow of a process material, comprising:
 - (a) a first chamber having a rigid outer shell, the first chamber being divided into first and second regions by a flexible boundary, the second region being filled with a non-compressible fluid;
 - (b) a second chamber having a rigid outer shell, the second chamber being divided into first and second regions by a flexible boundary, the second region being filled with a non-compressible fluid;
 - (c) an inlet flow control device arranged to provide fluid communication between a material input line and alternately the first region of the first chamber and the first region of the second chamber;
 - (d) an outlet flow control device arranged to provide fluid communication between a material output line and alternately the first region of the second chamber and the first region of the first chamber; and
 - (e) a chamber control device arranged to provide fluid communication between the second region of the first chamber and the second region of the second chamber.
2. (Original) The apparatus according to claim 1, wherein each flexible boundary is generally annular, thereby forming a respective inner lumen, and coaxially

disposed within its respective outer shell, thereby forming a respective outer lumen between the flexible boundary and the outer shell.

3. (Original) The apparatus according to claim 2, wherein the inner lumen includes the first region and the outer lumen includes the second region.
4. (Original) The apparatus according to claim 1, wherein the inlet flow control device includes at least two valves, one valve arranged between the material input line and the first region of the first chamber and another valve arranged between the material input line and the first region of the second chamber.
5. (Original) The apparatus according to claim 1, wherein the outlet flow control device includes at least two valves, one valve arranged between the material output line and the first region of the first chamber and another valve arranged between the material output line and the first region of the second chamber.
6. (Original) The apparatus according to claim 1, wherein the inlet flow control device and the outlet flow control device cooperate to ensure that each first region communicates with no more than one of the material input line and the material output line at a time.
7. (Original) The apparatus according to claim 1, wherein the chamber control device comprises:
 - (a) a conduit fluidly interposed between the first and second chambers; and

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- (b) a flow control valve arranged to control the flow of non-compressible fluid between the second region of the first chamber and the second region of the second chamber.

8 - 15. (Canceled)